

# DOCUMENT RESUME

ED 079 472

VT 020 136

TITLE Summaries of Research Studies in Agricultural Education Southern Region, 1971-72.  
 INSTITUTION Louisiana State Univ. and A and M Coll. System, Baton Rouge. School of Vocational Education.  
 SPONS AGENCY American Vocational Association, Washington, D.C. Committee on Research in Agricultural Education.  
 PUB DATE 72  
 NOTE 57p.  
 EDRS PRICE MF-\$0.65 HC-\$3.29  
 DESCRIPTORS \*Abstracts; \*Agricultural Education; \*Agricultural Research Projects; Annotated Bibliographies; Doctoral Theses; \*Educational Research; Masters Theses; \*Research; Vocational Education  
 IDENTIFIERS Southern Region

## ABSTRACT

This document contains a compilation of research in agricultural education completed during the 1971-72 year. Presented in abstract form, the studies represent the work of persons in ten states of the Southern Region. The abstracts are arranged alphabetically by author and include the purpose, methodology, and findings. Announcements of topics now being researched in the area are listed in a separate section along with the researcher's name and school affiliation. (SN)

ED 079472

SUMMARIES OF RESEARCH STUDIES IN AGRICULTURAL EDUCATION

SOUTHERN REGION

1971-72

Louisiana State University and  
Agricultural and Mechanical College  
School of Vocational Education  
Baton Rouge, Louisiana

VT020136

FILMED FROM BEST AVAILABLE COPY

ED 079472

SUMMARIES OF RESEARCH STUDIES IN AGRICULTURAL EDUCATION

SOUTHERN REGION

1971-72

U S DEPARTMENT OF HEALTH,  
EDUCATION & WELFARE  
NATIONAL INSTITUTE OF  
EDUCATION

THIS DOCUMENT HAS BEEN REPRO-  
DUCED EXACTLY AS RECEIVED FROM  
THE PERSON OR ORGANIZATION ORIGIN-  
ATING IT. POINTS OF VIEW OR OPINIONS  
STATED DO NOT NECESSARILY REPRESENT  
OFFICIAL NATIONAL INSTITUTE OF  
EDUCATION POSITION OR POLICY

Louisiana State University and  
Agricultural and Mechanical College  
School of Vocational Education  
Baton Rouge, Louisiana

## INTRODUCTION

This compilation of research in agricultural education includes summaries of 62 studies reported during 1971-72 from 10 states of the Southern Region.

Abstracts of studies completed in 1971-72 were reported by state departments of education and teacher education institutions in the region. All studies submitted are included in this report although some may not meet the criteria that were established for the selection of studies to be included in the division publication.

This compilation of Summaries of Research Studies in Agricultural Education is an activity of the Research Committee of the Agricultural Education Division of the American Vocational Association.

Charlie M. Curtis  
Southern Region Representative  
Research Committee  
Agricultural Education Division  
American Vocational Association

SUMMARIES OF STUDIES IN AGRICULTURAL EDUCATION  
SOUTHERN REGION, 1971-72

ABSHIRE, ALLISON JOSEPH. A Study of Dropouts in Louisiana Vocational-Technical Schools. Ph.D. Dissertation, Department of Agricultural Education, 172 p. Louisiana State University, Baton Rouge.

Purpose.-- The primary purpose of this study was to obtain data about dropouts in Louisiana vocational-technical schools that could be useful in efforts to overcome this problem. Specific objectives were: (1) to determine some characteristics of dropouts, (2) to pin-point major causes of dropouts, (3) to discover factors that may encourage longer tenure in school, (4) to learn the occupational status of dropouts, and (5) to make recommendations which might be helpful in diminishing the problem.

Method.-- The descriptive method using the survey technique was the research procedure followed. Data were obtained primarily from three sources -- school records, school directors and dropouts. Questionnaires were completed by dropouts and by school directors. Additional information was secured through interviews with vocational education leaders at the state level, vocational-technical school directors, personnel, students and dropouts. Visits were made to many schools to get a good view of their total operation.

Findings.-- Dropouts included males and females, married and single pupils, students of all ages enrolled, and students from all courses taught. A majority of respondents quit school during the first six months of training.

Data from this study show a direct relationship between the dropout problem and the following eight factors:

1. Insufficient funding resulting in inadequate facilities and equipment, and shortage of personnel.
2. Low economic status of many parents.
3. The desire for employment by many students.
4. Lack of self-discipline by many students reflected in excessive absences, lack of motivation, unsatisfactory progress, and disciplinary problems.
5. Marriage or marital plans.
6. Illness or physical disability of students or immediate family members.
7. Lack of encouragement, personal interest, and individual assistance by some instructors.
8. Lack of vocational training and guidance in secondary school to assist students in making wise training or career choices in vocational-technical school.

No relationship was found between the dropout problem and the following factors:

1. The attitudes of parents regarding education.
2. The educational level of parents.
3. Prior educational level of dropouts.
4. Learning ability of dropouts.

Factors that would have encouraged students to remain in school longer included the following:

1. More part-time jobs for students.
2. More financial aid such as loans, scholarships, assistantships and grants.
3. Better facilities, equipment and teaching aids.
4. More guidance, encouragement and assistance by school personnel.
5. Extra curricula activities.

Of the 180 respondents, 10.54 per cent were unemployed. Those employed were working in 62 different kinds of jobs. Many of these were low paying jobs. More respondents were doing secretarial work than any other type. Only 50 per cent of the dropouts indicated satisfaction with present job.

ACUFF, JOHN P. A Career Development Model for Kindergarten Through Sixth Grade. Thesis M. S., 1972, University of Tennessee. 99 p. Library, University of Tennessee, Knoxville.

Purpose.-- To identify a sequential pattern for the objectives and content of a career development program for kindergarten through the sixth grade.

Method.-- In addition to the review of literature, twenty-three local and state projects were analyzed for objectives and program content. As these studies were compared and synthesized, a career development model was designed.

Findings.-- The aim of this model is to provide the student with experiences upon which he can select a general occupational area for further exploration beyond grade six. The model structure contains objectives, activities and experiences.

Phase I of the model is a program designed for kindergarten through the third grade. This phase is based upon developing an awareness of careers related closely to the environment of the child. It is primarily designed around those careers associated with the school, the family and the local community. Major aspects of this phase were division of labor, appreciation for all kinds of work, decision making, self-development, pride in work, and success on the job.

Phase II of the career development model is designed for grades 4-6. This phase of the model is designed around occupational

clusters. This part of the model is composed of activities and experiences designed to give the student a broad background in the galaxy of careers. The occupational clusters used and the activities developed in this phase of the model are as follows: Producing and Processing Occupations, Construction Occupations, Manufacturing Occupations, Marketing and Distribution Occupations, Transportation and Public Service Occupations, Recreation and Natural Resource Occupations, Human Service Occupations, Personnel Service Occupations, and Communications and Media Occupations.

ANTHONY, WILBON RAY and GUL M. TELWAR. A Study of Local High School Supervisors of Vocational Education in the State of Tennessee. Departmental Study, Department of Agricultural Education and Agricultural Economics, Tennessee State University, Nashville.

Purpose.-- To identify the duties and qualifications of high school supervisors of vocational education in the state of Tennessee and to gather consensus about the qualifications of the supervisors and the size of the school districts having vocational supervisors.

Method.-- Separate questionnaires were mailed to the superintendents and supervisors and teachers in the sixteen school districts. They were asked to reply to the questions concerning the qualifications desired of new supervisors and the duties of supervisors. The teachers were asked questions regarding duties of supervisors and the supervisors were asked regarding the progress in the department resulting from their presence.

Findings.-- The study found that the school districts which have an enrollment of above 5,000 students have vocational education supervisors. Supervisors of vocational education are hired either on daily basis or yearly basis. The study also revealed that most of the superintendents prefer new supervisors with a Master's degree and a teaching experience of 1 to 10 years and training in the area of vocational education.

There was a great deal of agreement about the duties of supervisors among the supervisors and superintendents. But there was disagreement among the teachers about the duties of supervisors.

AVENT, ZACK E. and GUL M. TELWAR. A Comparative Study of Negro Farmers Who Attended and Those Who Did Not Attend Adult-Farmer Classes in Montgomery and Robertson Counties in Tennessee. Departmental Study. Department of Agricultural Education and Agricultural Economics, Tennessee State University, Nashville.

Purpose.-- To study the impact of agricultural extension on Negro farmers. In particular to study the significance of adult-farmer classes in the success of their farm business.

Method.-- Two groups of twenty farmers each were selected from the counties under study. One of these groups attended adult-farmer classes conducted in the counties and the other group did not. Questionnaires were sent to all the farmers under study with a specific reference to the adult-farmer classes and a comparative study of their replies was made.

Findings.-- Both of the groups under the study had a comparable age distribution. The size of the farm holdings of the group who attended classes ranged from 51 to 110 acres; whereas, the size of holdings of those who did not attend classes ranged from 30 to 70, in the majority of the cases. The average cultivated area in the former class is 78.5 acres and in the latter class it is 49.1 acres. Among those who attended classes, 40 per cent built new homes and 80 per cent remodelled their old homes and 25 per cent built barns. Among those who did not attend classes 25 per cent built new homes and 10 per cent built barns. The average value of farms owned by the first group was \$12,205 and that of farms owned by the second group was \$9,679. Even the income distribution of farmers in the second group does not compare favorably with those in the first group.

BASS, B. C. The Role of Supervising Teachers in Training Prospective Teachers of Vocational Agriculture. Staff Study, 1972. 22 p. Agricultural Education Office, Virginia Polytechnic Institute and State University, Blacksburg.

Purpose.-- The primary purpose was to develop a list of behavioral activities in which agricultural education supervising teachers should engage.

Method.-- Twenty-one agricultural education supervising teachers and six supervisors provided data from which their degree of agreement was determined on whether agricultural education supervising teachers should engage in each of the 72 behavioral activities.

Findings.-- The agricultural education supervising teachers and supervisors strongly agreed or agreed that 64 of the 72 activities submitted to them should be carried out by an agricultural education supervising teacher and were close to agreeing that each of the other eight activities should also be engaged in by an agricultural education supervising teacher.

The participants also listed 33 additional activities which one or more of them strongly believed an agricultural education supervising teacher should carry out.



BEACH, JAMES WAYNE. A Study of Employment Opportunities and Competencies Needed for Horticultural Occupations in the Tahlequah Area. Report M.S., 1972, Oklahoma State University. 37 p. Department of Agricultural Education, Oklahoma State University, Stillwater.

Purpose.-- The purpose of this study was to obtain information about the horticultural industry to determine employment opportunities and to find the competencies that should be stressed in developing a curriculum for vocational agriculture students in a horticultural training program.

Method.-- The data for this study were collected from eight selected horticultural occupations employers in Tahlequah and the surrounding area of a radius of 30 miles.

Findings.-- Employment opportunities appear to be quite numerous within the next five years, particularly at skilled and semi-skilled levels. It appears that the more experience or training the individual has, the more opportunities he has. Therefore, it would seem that a training work-experience program would be quite desirable in the Tahlequah area. Salary levels appear to be commensurate with skills and abilities which are most beneficial to the business. A high school education, with additional training or experience would be most advantageous for potential employees. It appears the needs in employment will be greater than the number of persons available with the required educational background in the next five years. Agricultural competencies needed to train horticultural workers are largely determined by the function or functions of the horticultural employment. Many of these competencies can basically be taught in the classroom. In terms of a training program, it was recommended that the program devised be two years in duration, the junior and senior years, with a summer work program in conjunction with a horticultural business, the summer between the two years. This would be part of the vocational agriculture program. Many of the employers felt that this program would not only supply them with better qualified personnel, but also there would be much more opportunity for advancement for the employee.

BERNINGER, THOMAS D. The Educational Importance and Methods of Operation of School Farm Laboratories in Oklahoma. Report M.S., 1972, Oklahoma State University, 48 p. Department of Agricultural Education, Oklahoma State University, Stillwater.

Purpose.-- The major purpose of this study was to determine the manner in which a selected group of vocational agriculture teachers and their students perceived the educational benefits of school farm laboratories and to determine operational procedures and guidelines for administering school farm laboratories.

Method.-- Specific objectives were formulated to determine: (1) features regarding school farms including size, extent of use, facilities, ownership and other factors, (2) operational and management procedures for school farms, (3) characteristics of students utilizing the school farm, (4) opinions of students and teachers regarding value of school farms. The study was limited to 35 schools selected by the district supervisors as their top schools with a school farm laboratory. Each supervisor submitted seven schools per district. Questionnaires were sent to the 35 schools, each teacher picked at random five students utilizing the school farm. The completed questionnaires were returned with 20 teachers and 89 students responding from a total of 20 schools.

Findings.-- The 20 school farms reported the following averages: (1) enrollment of 70.10, (2) acreage 32.35, (3) operation time 10.1 years with 26.89 per cent of total enrollment utilizing the farm for projects. The schools took advantage of demonstrations and experiments listing livestock then crops in order of preference. Laboratories were well equipped with adequate facilities available for different enterprises. The major means of funding farms in order were: (1) school funds, (2) fees, (3) FFA, (4) vocational agriculture funds. The teachers with the largest enrollment spent more time on the school laboratory. The vocational agriculture teachers felt the students utilizing the school farm should take part in operation and decision making. Also, 89 per cent of the teachers reported school farms as a necessity. However, all the responding 20 teachers felt the school farm would benefit the vocational agriculture program. Seventy-one per cent of the students lived within two miles of the farm. The interest of students in terms of enterprise ranked in order was (1) livestock, (2) crops, (3) forestry. Students want and receive opportunities to make decisions. Fifty-seven (64.04 per cent) of the students that used the farm attended college, while 35.83 per cent of the students on the school farm entered the area of agriculture either educationally or occupationally. Students were in general agreement that school farms are valuable for providing agricultural and personal growth experiences.

BROOKS, WILLIE F., JR. Occupational Opportunities in Agriculture in David County, Tennessee. Departmental Study. Department of Agricultural Education and Agricultural Economics, Tennessee State University, Nashville.

Purpose.-- The purpose of this study is to determine the number and types of off-farm occupational opportunities in Davidson County, Tennessee and to provide information about off-farm occupations in agri-industry, the nature of work, and the educational qualifications required for each occupation.

Method.-- Population required for this study was identified by referring to the telephone directory. Data required was collected by means of questionnaires mailed to firms, agencies, and also through personal interviews.

Findings.-- Employers are in general unwilling to employ candidates with less than high school education level. Job opportunities in the area of agriculture are positively correlated with low-level education. Nearly 37 per cent of the total occupations listed required at least post high school training. The largest number of jobs were available in government agencies and they required at least a Baccalaureate Degree.

Post-high school vocational training is found to be beneficial for successful entry into off-farm careers in agriculture and the Department of Education should try to intensify vocational training programs to impart the necessary skills.

CHEATHAM, JACK ALTON. The Planning, Development and Implementation of a Young Farmer Organization in Comanche, Oklahoma. Thesis M.S., 1972, Oklahoma State University. 37 p. Department of Agricultural Education, Oklahoma State University, Stillwater.

Purpose.-- The purpose of the study was to determine if there was a need for the establishment of an organized Young Farmer class in the Comanche community and to evaluate the usefulness as well as the interest of such a program to potential members. A concurrent purpose was to determine potential members' preferences as to selected organizational and procedural factors for conducting a Young Farmer program.

Method.-- This study was limited in scope to those Young Farmers and potential Young Farmers of the Comanche school district. A personal conference was held with the Superintendent of Schools along with other administrators. Information pertaining to the Young Farmer Association of Oklahoma was obtained from the state coordinator. Data for the study were obtained by personal interviews and questionnaires from each of the Young Farmers in the community as well as other young men that might be potential members at some future date. The interests of the prospective members were determined as to the possibility of an organizational discussion meeting to be held at some future date.

Findings.-- Ninety-four per cent of the 39 young men were high school graduates, and 76 per cent of them had received four years of training in vocational agriculture. This is indicative of the interest of the young men to further their study in the field of agriculture. Approximately two-thirds of the respondents that were involved in college level were in agriculture related areas. A small 12 per cent of the 39 respondents were full-time farmers; however, 69 per cent were involved in farming to some degree; and only 19 per cent were not involved in farming to any degree. There was a definite correlation between the major interest areas of study preferred by the respondents and the major enterprise areas of the community.

CHUMBLEY, JOHN DALE. A Cost Analysis of Selected Vocational and Technical Education Programs in Oklahoma. Dissertation, Ed.D., 1972, Oklahoma State University. 124 p., Library, Oklahoma State University, Stillwater.

Purpose.-- The main objectives of this study were (1) to develop a cost procedure that could be applied to cost information received from Oklahoma's public schools to compute the average annual operating cost of selected vocational and technical education programs in Oklahoma; (2) to develop and validate a method for determining each cost item used in the procedure; (3) to establish and validate cost for each vocational and technical program selected.

Method.-- The cost information in the study was obtained from a majority of the public schools in Oklahoma which have vocational and technical education programs. The cost procedure shown in the study was applied to the cost information received from the schools to determine the average annual operating cost of selected vocational and technical education programs in Oklahoma. A separate cost was computed for the high school, area school, and junior college programs. After the average annual operating cost was computed for each vocational and technical education program investigated, a panel of Oklahoma public school administrators critiqued the findings of the study. The panel consisted of two high school, two area school, and two junior college administrators. The selection of the administrators was based upon their knowledge of vocational and technical education program costs.

Findings.-- The panel of public school administrators who reviewed the findings of the study felt the average annual operating costs were representative of the average cost of programs and would serve as a guideline for the cost of vocational and technical education programs in Oklahoma. The procedure for determining the average annual operating cost of vocational and technical education programs presented in the study can be used to determine the annual operating cost of any type of educational program in any state or country. The cost information is an initial effort in providing annual costs of programs for Oklahoma that can be used by school administrators and the educational community as a general guideline to (1) plan for future vocational and technical education programs; (2) assess the results of ongoing vocational and technical education programs and (3) decide among alternative vocational and technical education programs.

CLARK, GARY CARL. The Effects of Prior Exposure to Behavioral Objectives on Student Recall and Retention. Thesis M.S., 1972, Oklahoma State University, 69 p., Oklahoma State University Library, Stillwater.

Purpose.-- This experimental study attempted to determine the effect on student recall and retention resulting from exposure to specific behavioral objectives.

Method.-- An experimental and a control group were formed from intact vocational agriculture and/or agricultural mechanics classes at each of four selected high schools in Oklahoma. Student teachers taught a unit of instruction, "Fundamentals of Electricity," preceded by a pretest. A post-test immediately followed the instruction, and a retention test was administered four weeks later. The data were statistically treated through two separate analyses of variance to determine significance.

Findings.-- The analyses revealed that prior exposure to behavioral objectives did not significantly affect student recall or retention. A statistical significance between pretest and post-test scores was noted for all students, on the average, whether informed of the objectives or not.

CORBIN, CURTIS, JR. Selected Characteristics of Students Enrolled in Agri-Business Sales and Service and Production Programs in Vocational Agriculture. Doctoral Dissertation, 1972. University of Georgia. 144 p. Library, University of Georgia, Athens.

Purpose.-- The purpose of this study was to analyze and compare selected personal, background and situational characteristics; educational aspirations; occupational preference; and vocational maturity of students enrolled in agri-business and production agriculture programs.

Method.-- Data were collected from 391 eleventh and twelfth grade male students of which 189 were in agri-business and 212 were in production agriculture. A questionnaire and the Vocational Development Inventory Attitude Test were administered to the total sample.

Findings.-- The average age of the agri-business students was 17.20 years as compared to 16.96 years for the production agriculture students.

The two groups were significantly different as to the year of enrollment in vocational agriculture.

Approximately 82 per cent of the agri-business students and 64 per cent of the production agriculture students were participating in a supervised practice program.

A greater number of production agriculture students participated in school-sponsored sports than did the agri-business students.

The two groups were also significantly different as to the type of occupations, other than farming, in which their fathers were engaged.



Approximately 61 per cent of the agri-business students indicated they were farm residents as compared to 51.48 per cent of the production agriculture students.

Although differences were observed, they were not significant for the following variables: participation in school sponsored clubs; type of school sponsored sports in which the students were active; number of years lived on a farm; size of farm upon which the students live or have lived; educational aspirations; occupational preference; father's place of employment; father's age distribution; father's educational attainment; family size; educational achievement (GPA); and means of the VDI Attitude Test Scores.

CRUNKILTON, JOHN R. Testing of Model for Evaluation of Secondary School Programs of Vocational Education in Agriculture -- Phase II. Staff Study, 1972. Virginia Polytechnic Institute and State University, 55 p., Agricultural Education, Vocational-Technical Division, Blacksburg.

Purpose.-- The major objective of the study was to test a model for evaluation of vocational agricultural programs in selected schools throughout Virginia. The sub-objectives were to refine the list of knowledge and abilities which a student may have used in their jobs and to test the feasibility of the procedural manual developed for use of the evaluation model.

Method.-- Phase II of this project expanded the testing of the evaluation model to two other schools located in Virginia. This resulted in the study being conducted with three schools. Two graduating classes of each school were followed up to determine the use made of agricultural skills and abilities in their jobs held since graduation from high school. Other data collected included the identification of a training center for occupational experience programs, number of agricultural employees needed in the future, adult attitudes toward the agricultural program, and other data pertinent to an agricultural program.

Findings.-- The overall model format for the collection of data and the data-collecting instruments appeared to present a viable approach to the evaluation of a total program of agricultural education.

A review of the data collected indicates the data could be used in many ways. Several uses would be: (a) Developing curriculum for new options or revision of current curriculums; (b) Identifying sources of new occupational training centers; (c) Identifying types of occupational experience programs which could relate to the program of instruction; (d) Keeping current adult programs up to date; and (e) Projecting the financial need and resources required for the program in the future.

CRUNKILTON, JOHN R., C. E. RICHARD, and BOBBY R. WRIGHT.  
A Study to Determine the Use Made of Local Agricultural Advisory  
Councils in Virginia. Staff Study 1972. Virginia Polytechnic  
Institute and State University, 31 p., Agricultural Education,  
Vocational-Technical Division, Blacksburg.

Purpose.-- The purpose of this study was to determine the  
number of departments of vocational agriculture in Virginia that  
have an active advisory council and the extent to which the  
council functions.

Method.-- All agricultural departments in Virginia were  
mailed a questionnaire with a stamped, self-addressed return  
envelope. A follow-up announcement was made in the monthly news-  
letter received by all teachers. The questionnaire was designed  
to determine the extent to which an active advisory council was  
functioning. In addition, those departments not using advisory  
councils were asked to supply information as to why an advisory  
council was not being used. Data collected were summarized in  
tables by numbers and percents.

Findings.-- Of the 156 teachers returning the questionnaire,  
31 per cent were responsible for an advisory council which met at  
least once per year. Thirty-seven per cent of the councils met  
2 times per year, 25 per cent once a year, and 20 per cent 3 times  
per year.

Agricultural teachers selected council members in 56 per  
cent of the councils.

Advisory Council officers were annually elected in 44 per  
cent of the councils and 38 per cent of the councils had a program  
of work.

Agricultural teachers prepared the agenda for the meeting  
in 52 per cent of the councils and presided over the meeting in  
46 per cent of the councils.

Program areas studied most by the councils were:

- a. Annual program of work
- b. Agricultural courses to be offered
- c. Content for the course of study
- d. Physical facilities

Advantages indicated by teachers for having a council were:

- a. Public relations potential
- b. Excellent means of communication between school and  
public
- c. Provide opportunity for citizens to work with school  
personnel

Agricultural teachers did not see the following as advantages:

- a. Improvement of teacher salary
- b. Ways of circumventing the board of education

Reasons why councils have failed were:

- a. Lack of member interest
- b. Failure of past council influence attitudes toward reorganization

Reasons why teachers did not have a council:

- a. Lack of teacher understanding of purpose and function of the council
- b. Lack of confidence on part of the teacher

DALE, SAM E., JR. Activities and Factors Considered Important in the Implementation of Career Education Programs at the Pre-High School Level in Louisiana. Dissertation Ph.D., 1972, Department of Agricultural Education, Louisiana State University, Baton Rouge.

Purpose.-- This study was an attempt to identify activities and factors essential for the implementation of a pre-high school career education program in Louisiana, as conceived by six professional education groups: parish superintendents, parish supervisors, guidance counselors, teacher educators, principals, and teachers.

A knowledge of the concepts held by those administering, structuring curriculums, counseling, training teachers and teaching will give direction, scope, content, and methodology to the relatively new program of career education in the public schools of Louisiana. Not only is it important that one knows what others conceive, but that all groups have a clear philosophy of the role they are to assume in performing the task of educating all people for useful and productive lives.

Also this study was an attempt to provide information that will be useful to educators in the state of Louisiana as they approach educational reform and assist in the development of the concept that career education offers a reasonable goal to help young men and women find fulfilling and productive lives in our society.

Method.-- The descriptive survey method utilizing the questionnaire technique was developed for this study. Questionnaires consisting of ten major divisions with 87 activities and factors were mailed to 66 parish and city superintendents, 66 parish and city supervisors, 66 guidance counselors, 17 teacher educators, 66 principals and 66 teachers.

The instrument was first submitted to a jury of professional educators in colleges, research centers, and State Department of Education personnel throughout the South for clarity, validity, and pertinency of items. All members of the jury except one responded with comments and suggestive changes. These suggestions were incorporated into the Data Gathering Instrument and submitted to the researcher's doctoral committee for review.



The mean responses of the six groups were calculated to obtain a rating for each item from each professional group. As a test for significant differences among these groups, the analysis of variance procedure was used. The F-test was applied in determining the degree of difference existing. Finally the null hypothesis was set up as a basis against which each test was to be made and was accepted or rejected at the .05 level of confidence.

Findings.-- Significant differences existed among the responses to 21 of the 87 activities at the .05 level of confidence. In most cases these differences were based on degree of importance assigned rather than concepts of the roles to be assumed. This is reflected by the fact that all activities were rated at least important by the six groups.

Two of the areas--Administration and Out of School Sources--were extremely important according to the average of all responses.

Eight of the areas--Supervisors; Instructional Program Grades K-6; Instructional Program Grades 7-9; Teaching Personnel to Teach Career Education Grades K-6; Teaching Personnel to Teach Career Education Grades 7-9; Guidance Service; Specialized Teachers and Research--were important according to the average of all responses. No areas were considered unimportant by the responding groups.

DAY, VENCIAL BERNARD and GUL M. TELWAR. Determining the Need for Special Programs in Vocational Training for the Disadvantaged and Handicapped Students in Tennessee. Departmental Study, Department of Agricultural Education and Agricultural Economics, Tennessee State University, Nashville.

Purpose.-- To determine the need for special programs in Vocational Training for the disadvantaged and handicapped students in Tennessee.

Method.-- Information was collected by means of a questionnaire circulated to the members of a random sample obtained from a list of Vocational Agriculture Departments in Tennessee and the data collected were tabulated and analyzed.

Findings.-- (1) Nearly half of the students under the study had parents with annual income below the poverty line, i.e., \$3,000. (2) There is a definite agreement among the Vocational Agricultural teachers about the need for special programs for the disadvantaged and handicapped students. (3) About 73 per cent of the schools had no teachers for the disadvantaged and handicapped students. (4) The most important and disquieting feature of the study is that the placement of disadvantaged and handicapped students was not obtainable, because of lack of follow-up activities.

The study revealed that there is a definite need for new programs in Vocational Training in aiding these students with different backgrounds, different problems and different potentials.

DEVORE, ROYLE ARTHUR, JR. Selected Benefits of Young Adult Farmer Programs in the Northwest Supervisory District of Oklahoma as Perceived by Members. Thesis, M.S., 1972. Oklahoma State University, 39 p., Oklahoma State University Library, Stillwater.

Purpose.-- The main purpose of this study was to ascertain what benefits young farmers derived from active, formally-organized programs of instruction in the Northwest Supervisory District of Oklahoma.

Method.-- This study was limited to the members of 11 Young Farmer chapters in the Northwest Supervisory District of Oklahoma in attendance at the February meeting of their respective chapters. The chapters included in this study were: Aline-Cleo, Ames, Canton, Covington, Drummond, Fargo, Fort Supply, Carber, Hennessey, Taloga, and Tonkawa. A questionnaire to determine young farmer's reactions to selected benefits was formed through suggestions and refinement by the Agricultural Education staff and the State Vocational Agriculture Supervisory staff. This questionnaire was sent to the Vocational Agriculture instructors of the chapters selected January 15, 1972 to be completed by the chapter members at their February meeting. Ninety-one questionnaires were returned from eight chapters of the 11 chapters selected. The data obtained from the questionnaire were tabulated and expressed as percentages.

Findings.-- The average young farmers responding to the questionnaire were 39 years of age operating over 800 acres of land and had been in the Young Farmer program three years. An overall summary of the findings show that young farmers received the highest degree of benefit from leadership-related benefits. The areas of additional related benefits and improved farming practices, and social-related benefits all received on the average an agree response. The young farmers felt their economic status had not changed because of the program. Those statements receiving the highest ratings were: (1) Vocational Agriculture instructors as key factors in organizing and maintaining the program, (2) The Young Farmer program being of benefit to all farmers regardless of age, and (3) Officers developing leadership abilities.

DIXON, W. PAUL. Changes Made, Needed, and Proposed in the Vocational Agriculture Curriculum in Tennessee Since the Enactment of the 1968 Vocational Education Amendments. Thesis M.S., 1971. University of Tennessee. 61 p. Library, University of Tennessee, Knoxville.

Purpose.-- The primary purpose of the study was to determine the changes made, needed, and proposed to curricula in vocational agriculture in Tennessee since passage of the 1968 Vocational Education Amendments.

Method.-- Data were collected from regional supervisors of agricultural education and selected teachers of vocational agriculture through a mailed questionnaire developed by the investigator.

Findings.-- The offering of specialized courses in agricultural mechanics was definitely the most significant curricula change instituted by teachers of vocational agriculture. Slightly more time was being devoted to agricultural mechanics than production agriculture. These course offerings were followed in order by agricultural supplies and sales, ornamental horticulture, and agricultural products.

Farm mechanics received more teaching time than any other area of production agriculture followed by animal science, plant science, soil science, farm management, and leadership training.

Whole class instruction had decreased in importance while individualized instruction had shown a marked increase during the past four years. Plant science, animal science, farm management, forestry, and pulpwood production had received the greatest decrease in emphasis. Farm mechanics, leadership, landscaping, and small gasoline engines were receiving more emphasis in the classroom than four years ago. Production agriculture had declined in curricular emphasis and off-farm agricultural occupations had shown a marked increase.

It was indicated that agricultural sales and services, leadership, greenhouse management, farm mechanics, and landscaping should receive more emphasis in the decade ahead.

It was reported that 17 per cent of the graduates during the past four years were engaged in farming and 38 per cent in off-farm agricultural occupations.

DOYLE, BOBBY LEROY. The Status of Occupational Clusters and Job Titles in Adair County with Implications for Improvement of Vocational Education Offerings in the Area. Thesis, M.S., 1972, Oklahoma State University, 32 p. Department of Agricultural Education, Oklahoma State University, Stillwater.

Purpose.-- The purpose of this study was to identify and assess the status of occupational clusters and job titles in Adair County, Oklahoma, and surrounding area and to draw implications from these findings for the improvement of vocational education offerings in the area.

Method.-- Data for the study were collected by personal interview of 327 different companies, industrial complexes or individual owner-operator establishments. The interviews were conducted by selected vocational educators and members of the Stilwell, Oklahoma Chamber of Commerce.

Findings.-- The findings of the study resulted in the identification of approximately 2,555 workers by occupation, 562 job vacancies, 823 new job openings, and a total of 3,941 job opportunities. The major occupational clusters identified in order of importance by total employment opportunities provided were: Manufacturing, Automotive Sales, Construction, Medical, Office, Food Service, Maintenance/Installation, Public Service, Repairman and Miscellaneous. Based on these findings the implication was drawn that there were at least eight training areas needed in Adair County, including Automotive Service, Food Service, Construction, Health, Office, Equipment Operation, Distributive, Textiles and Related, and Other.

DRINKWATER, FLOYD W. Opinions of A Group of Senior High School Teachers Concerning the Nature of Certain Phases of the Program of Agricultural Education for Junior High Schools in Virginia. Thesis M.S., 1972, Virginia State College. 49 p. Library, Virginia State College, Petersburg.

Purpose.-- To ascertain the opinions of senior high school teachers regarding experiences junior high school students in agriculture need for better articulation between the two levels of high school.

Method.-- The investigation divided the eight instructional areas found in the Virginia Guide for Agriculture Science and Mechanics I and II into units of teaching. With these teaching units he prepared a schedule which utilized a scale of very important, important, some value, and not relevant. This schedule, along with a letter of instruction, was sent to teachers of senior high school students of agriculture in Virginia. Ninety-six teachers cooperated in the effort.

Findings.-- Drawing, sketching and understanding how to read plans needed more emphases in the junior high school.

Increased welding skills were found to be helpful.

The ability to identify and correctly use basic tools seemed important.

Adequate exposure to the use of power woodworking tools was an expressed need.

Safety instruction needed to be improved in the junior high school especially along the areas of eye protection and machine operation.

EDWARDS, JAMES C. To Ascertain the Nature of Contest Participation and the Character of the Awards Earned by the Junior High School FFA Chapters in the State of Virginia from 1968 to 1971. Thesis M.S., 1972, Virginia State College. 48 p. Library, Virginia State College, Petersburg.

Purpose.-- To determine the types and kinds of contests and awards earned by junior high school FFA chapters in the State of Virginia from 1968 to 1971.

Method.-- Using the nominative-survey method the writer prepared and mailed a schedule to 48 junior high school FFA chapter advisors, randomly selected, throughout Virginia. This asked for information concerning contests participated in and awards won, overall chapter activities, membership, classification and recommendations. The data obtained from this schedule provided information for the study.

Findings.-- Junior high schools that participated in FFA contests selected public speaking, farm mechanics, forestry, crop and livestock judging most frequently as the contests to participate in.

Junior high school members participated in award programs such as home improvement, safety, crop farming, dairy farming and wildlife conservation.

Few contests and awards were won on the chapter level and none on the national level.

The instructors recommended that a contest and awards program be developed for junior high school chapter members since they lacked the necessary knowledge, training and experience to compete with senior high school chapter members.

EFFANGA, ALOYSIUS. A Recommended Program of Agricultural Education on the Secondary Level for Schools in the South Eastern State of Nigeria. Thesis M.S., 1972, Virginia State College. 48 p. Library, Virginia State College, Petersburg.

Purpose.-- To secure information which could be used as guidelines for the development of a program of agricultural education for secondary schools in the South Eastern State of Nigeria.

Method.-- A study of the literature of departments of agricultural education found in American agricultural colleges and universities was made. Later interviews with certain state personnel, in administration, supervision and instruction, plus conferences with certain teacher trainers were to provide the data necessary to develop guidelines.

Findings.-- That there is a need for a new plan or program of education in agriculture in the South Eastern State of Nigeria on the secondary school level.

That adequate finance be provided to assure facilities, equipment, personnel and supplies to conduct the program.

That guidelines be established for vocational agriculture in Nigeria along the lines of Virginia's course of study. This would include agricultural science and mechanics I and II, plus option courses in agriculture production, machinery, business, processing and marketing, horticulture and forestry.

The method of financing the program should involve the Federal Ministry of Agriculture and Natural Resources and the State's Ministry of Agriculture.

HALLUM, EDDIE R. Selected Factors Associated with Enrollment in Vocational Agriculture I by Students in McIntosh, Muskogee, and Okmulgee Counties. Thesis M.S., 1972, Oklahoma State University, 26 p. Department of Agricultural Education, Oklahoma State University, Stillwater.

Purpose.-- The purpose of this study was to gather general descriptive data about the students, selected factors concerning supervised training program status, how students become acquainted with the program, factors influencing students to enroll, students' opinions of the program in comparison to other courses, the reactions of male students to female enrollment, and girls' evaluation of the program in McIntosh, Muskogee, and Okmulgee counties.

Method.-- The study population included Vocational Agriculture I students from 12 schools in a three-county area in Northwestern Oklahoma. Completed questionnaires were returned by 131 students from seven of the schools.



Findings.-- Hypotheses accepted as a result of the study were: (1) the greater percentage of Vocational Agriculture I students are male farm students with some type of supervised training program, (2) most students would be in vocational agriculture due to an interest in agriculture or an agriculturally-related field, (3) students would like vocational agriculture better than most of their other classes, (4) girls being in the organization would cause no major problems, and (5) there would be only a very small percentage of girls enrolled. Overall, it was concluded that vocational agriculture teachers were doing an excellent job of interesting students in the program.

HARTSFIELD, TED WAYNE. Selected Characteristics of Students Enrolled in Vocational Agriculture Occupational Training Programs in Oklahoma. Report, M.S., 1972, Oklahoma State University, 37 p. Department of Agricultural Education, Oklahoma State University, Stillwater.

Purpose.-- The purpose of this study was to attempt to identify and describe selected characteristics of students enrolled in Vocational Agriculture Occupational Training (VAOT) classes in Oklahoma and determine if the students were interested in an agricultural occupation for their future endeavors.

Method.-- Questionnaires were completed by 206 vocational agriculture occupational training students in 24 of the 25 departments contacted. The questionnaires were then tabulated by using item counts and percentages.

Findings.-- A summary of the study findings indicated that the parental income of most of the students fell into the \$8,000 to \$16,000 range. Students' parents obtained the major portion of their income from non-agriculture sources. FFA regular meetings, banquets and camps, school athletics, and church youth groups were popular activities of the students. Most students owned non-agriculture related property and had non-farm residences. Immediate objectives of the students surveyed were to attend college, and students were undecided as to their long-term objectives. Vocational agriculture instructors were most influential in recruiting students. Students would recommend VAOT to their friends, and nearly all were FFA members. Major conclusions were formulated that VAOT students come from homes with above average levels of income. Students are somewhat removed from the field of agriculture. Careers in agriculture are major goals of more than one-third of the VAOT students. Vocational agriculture instructors are the most influential group in recruiting students to enroll in VAOT.

HERRON, CLIFFORD J. A Comparison of Socio-Economic Status, Educational Attainment, and the Educational and Occupational Aspirations for the Child of On-Campus and Off-Campus Seasonally Employed Agricultural Workers (SEAW) at Tuskegee Institute. Thesis M.S., 1972, Tuskegee Institute. 64 p. Library, Tuskegee Institute, Tuskegee Institute, Alabama.

Purpose.-- The purpose of this study was to compare the socio-economic status and educational attainment of the Seasonally Employed Agricultural Workers (SEAW) trainees with their aspirations for their children.

Method.-- The subjects used in the study were 164 trainees of the SEAW training program. The subjects were divided into two groups (on-campus, off-campus) and four sub-groups: on-campus males, off-campus males; on-campus females and off-campus females.

Data for the study were secured through the use of two instruments (1) family interview schedules, and (2) social adjustment profile schedules.

The data collected were categorized and tabulated separately. Data were grouped according to type: socio-economic factors, educational attainment, educational aspirations and occupational aspirations. The data were reported in percentages.

Findings.-- Only 16 percent of on-campus males and 27 percent of on-campus females had completed 12 years of schooling. Only 6 percent of off-campus males and 15 percent of off-campus females completed 12 years. No members of any group completed any grade higher than 12.

Twenty-five percent of on-campus trainees indicated English as their best liked subject in school with 27 percent indicating mathematics. Of these trainees, only four percent indicated agriculture.

Forty-six percent of off-campus trainees indicated mathematics as their best liked subject in school and 27 percent indicated English.

Thirty-one percent of on-campus trainees disliked mathematics, and 27 percent disliked English. Seventy-nine percent of the off-campus trainees disliked mathematics, and 25 percent disliked English.

Seventy percent of off-campus fathers were undecided (Group VI) for their children, while Groups I and II ranked second and third respectively. Thirty-nine percent of on-campus fathers were undecided while 33 percent selected Group I.

Forty percent of on-campus mothers desired Group I and another 40 percent were undecided. Forty-eight percent of off-campus mothers



were undecided as to which Occupational Group they desired for their children, and 21 percent desired Group III.

Thirty-two percent of on-campus fathers wanted their children to attend Alabama State University while 13 percent preferred Tuskegee Institute. Thirty percent of off-campus fathers desired Tuskegee Institute, while 10 percent desired Alabama State University. In both instances, the majority of these trainees were undecided.

More than 26 percent of on-campus mothers were undecided. Seventy-two percent of off-campus mothers were undecided, and 15 percent desired Tuskegee Institute for their children to attend.

Sixty-six percent of off-campus fathers were undecided relative to the place where they desired their children to live as adults. Sixty percent of on-campus fathers were undecided, and only 19 percent desired that their children live in Alabama when they become adults.

Eleven percent of off-campus mothers desired that their children as adults live somewhere in Alabama, while 17 percent desired a place other than in Alabama. Seventy-one percent were undecided. Eighty-three percent of on-campus mothers were undecided, and 10 percent indicated that they desired Alabama as the place where they wanted their children to live as adults.

Fifty-one percent of off-campus trainees indicated that a better education could improve their family's economic condition, while 45 percent said that a better paying job could contribute.

Forty-nine percent of on-campus trainees stated that better paying jobs could help to improve the family's economic condition; 40 percent said better education could help, and over two percent said relocation could contribute.

HEWLETT, STEPHEN CAPRIL. A Study of the Vocational Education Curriculum at Turney Centre in Only, Tennessee. Department of Agricultural Education, Tennessee State University, Nashville.

Purpose.-- To study the Vocational Technical Educational programs, currently available to the inmates of the Turney centre for youthful offenders at Only, Tennessee and to determine the perception of the programs by teachers and inmates.

Method.-- Two questionnaires, one for the teachers and the other for the students, were developed and they were sent to the teachers and students with an accompanying letter of introduction. The data obtained in that manner were tabulated in terms of percentiles. Also a study of related literature was made to determine what constitutes an adequate program of education for a penal institution.

Findings.-- The study revealed that race distribution among the delinquents was almost even; that 85 per cent of them came from urban areas and that 75 per cent of the inmates have education below the 12th grade; and that almost all teachers hold a Bachelors degree and fairly experienced.

HOLLEY, CALVIN WESLEY, III. Perceptions of the Duties of Vocational Agriculture Teachers by Student Teachers Before and After Student Teaching as Compared to Perceptions by Cooperating Teachers. Thesis, M.S., 1972, Oklahoma State University. 69 p. Oklahoma State University Library, Stillwater.

Purpose.-- This study was an attempt to determine the perceptions of Agricultural Education student teachers toward selected major duties of a vocational agriculture teacher both prior to and following the student teaching experience and to compare these perceptions to those of their cooperating teachers.

Method.-- Data was collected by means of a standardized questionnaire. Two instruments were used, one a measure of the relative time spent performing, and the other the relative importance of the duty performed. Thirty-six student teachers and 20 cooperating teachers were used by this researcher in the study. This included all participating persons involved in the student teaching experience in the fall of 1970.

Findings.-- It was found that student teachers indicated a change in perceptions toward the perceptions of cooperating teachers following the student teaching experience in regard to the time spent performing the selected duties of vocational agriculture teachers in Oklahoma. It was also found that student teachers, in general, ranked most tasks under each selected duty quite closely to the importance of the selected duties. This was based on the student teachers group mean response following the student teaching experience.

INGRAM, AUSTIN C. Developing An Off-Farm Agricultural Education Program, Oliver Springs, Tennessee. Thesis M.S., 1971, University of Tennessee. 71 p. Library, University of Tennessee, Knoxville.

Purpose.-- The primary purpose of the study was to ascertain what skills and attitudes are needed for employment in off-farm occupations in the Oliver Springs High School area in Tennessee.

Method.-- A survey was developed by the investigator and information was secured by personal interview from agricultural businesses in the Oliver Springs High School area.

Findings.-- According to responses from the participating employers, off-farm agricultural training stations exist in the Oliver Springs High School area.

The respondents to the study indicated that a degree of competence based on levels of importance was needed in 13 general business skills, 17 agricultural mechanics skills, 13 animal science skills, and 16 crop and soil service skills. Twenty-six additional skills were listed as needing special emphasis for employment in agricultural businesses.

The employers felt that a development of personal traits within prospective workers was important and that they, along with the school and individual, should share in the task of instilling it within their employees.

The employers were willing to help plan and carry out an off-farm agricultural program, but felt that the major responsibility in developing a knowledge of technical agriculture in prospective employees should be assumed through the vocational agriculture program.

It was indicated that personality development in off-farm employment was more important than academic or technical skills.

IVERSON, MAYNARD J. Use of Resource People by Teachers of Vocational Agriculture in Kentucky. Staff Study, 1972. Department of Vocational Education, University of Kentucky, Lexington.

Purpose.-- The primary purpose of this study was to determine the utilization of resource people by teachers of vocational agriculture in Kentucky. Specific objectives included determining number and kinds of resource personnel used, means used in locating them, their effectiveness and areas where additional help was needed.

Method.-- All vocational agriculture teachers in Kentucky comprised the population of the study. Questionnaires were administered to approximately 200 teachers in attendance at district meetings during the Fall and Spring semesters.

Findings.-- Eight out of ten vocational agriculture teachers in Kentucky used resource personnel in their classes; five was the average number used. The most (7.6) were used in young farmer classes and the least in high school classes (3.1). One-third of the respondents increased the number of resource personnel used in 1972 over the previous year.

Most of the resource people used were from local and area agribusiness firms, the Cooperative Extension Service, financial institutions, agencies of the U. S. Government (SCS, ASCS, FLB, FHA, ect.), and the professions (lawyers, veterinarians, and the like). Few were from out-of-state.

Personal contacts were the major means of identifying and securing the services of resource personnel, county extension agents were the next most frequently listed source, class members, other vocational agriculture teachers, university contacts and local

advisory groups were also utilized. The State Staff (supervisors and teacher educators) were used the least.

Performance of resource people was primarily rated as "good" to "excellent."

Major problems experienced by teachers in using resource personnel were time in arranging and finding qualified people, keeping speakers on the topic and within the time limit, and cost.

Teachers expressed the need for additional resource people in a wide variety of areas, mostly the highly technical areas and new developments in agriculture.

JOHNSON, RAY L. A Follow-Up Study of Agricultural Education Graduates of North Carolina Agricultural and Technical State University From 1960 Through 1970. North Carolina Agricultural and Technical State University, Greensboro.

Purpose.-- The major purpose of this study was to gather data regarding agricultural education graduates with reference to where they were and what they were doing. Another purpose was to gather data to enhance future program planning and for advisement of undergraduate majors related to trends in employment opportunities, technology, and teacher supply and demand.

Method.-- The mailed questionnaire method was used to gather data for the study. The types of data collected were the location of the graduates, their present occupational status, experiences in teaching, average salary range, and the graduates' opinions in regard to the extent that the University contributed to their attainment of occupational success in their present occupations.

Statistical treatment of the data included percentage and frequency distribution, and chi-square analysis.

The scope of the study was limited to the agricultural education graduates of North Carolina Agricultural and Technical State University in Greensboro who received their Bachelor of Science Degrees during the period of August, 1960 through August, 1970.

Findings.-- More than 70 per cent of the graduates were employed in agricultural occupations. They were engaged in 24 different occupations. However; almost two-fifths (39.10 per cent) of the graduates were employed as teachers of agriculture; more than one-third (34.80 per cent) were employed in agriculturally-related occupations; one-fifth (20.30 per cent) in occupations unrelated to agriculture, and less than one-tenth (5.80 per cent) were employed as teachers in other academic areas. Almost half (44.85 per cent) of the graduates had held at least one or more teaching positions. Almost four-fifths (77.50 per cent) were employed for a twelve-month period, eg., graduates engaged in teaching agriculture. The average salary was \$9,325.50 per annum for the study population.

Almost four-fifths (78.30 per cent) of the graduates did not migrate very distantly from the teacher education institution. The vast majority (82.61 per cent) were married; a minority (17.39 per cent) were single and not any were separated or divorced.

There was a significant relationship (.05) between the graduates' occupational success and their preservice preparation in college. More than four-fifths (82.65 per cent) of the graduates felt that the professional course of study in the Agricultural Education Curriculum contributed very highly toward their occupational success. Almost three-fourths (71.05 per cent) indicated the general course of study and more than two-thirds (68.15 per cent) indicated the technical course of study as contributing to their occupational success. The number of graduates were decreasing by approximately three per cent annually.

JUBY, MARCUS LEE. Comparisons of the Extent of Emphasis or Importance Placed Upon Selected Aspects of Agriculture Mechanics Instruction in Vocational Agriculture. Dissertation, Ed.D., 1972, Oklahoma State University, 93 p. Oklahoma State University Library, Stillwater.

Purpose.-- The primary purpose of this study was to identify and compare selected factors which encouraged the initiation of and operational procedures for a separate course in agricultural mechanics. A concurrent purpose was to compare the instructional content of agricultural mechanics as a part of regular vocational agriculture to that of a separate course in agricultural mechanics.

Method.-- The population for this study consisted of the vocational agriculture departments who had offered, during the past three years, a separate course in agricultural mechanics. To obtain data for this study, all departments meeting the above criterion were characterized into continuing programs and discontinuing programs as pertaining to the separate course in agricultural mechanics. From the list of departments in each group, 15 schools were selected by stratified random sample, making a total of 30 schools in this study. The information obtained for this study was secured through the use of an interview schedule. Separate instruments were administered to teachers of each program in order to determine the extent of importance placed upon selected factors related to (a) initiating a separate course in agricultural mechanics, (b) continuing a separate course in agricultural mechanics, and (c) discontinuing a separate course in agricultural mechanics. In addition, information was secured pertaining to the extent of emphasis placed upon selected factors associated with (a) selecting students, (b) operational procedures, and (c) various instructional areas found in agricultural mechanics. These instructional areas were based upon the Oklahoma Basic Core Curriculum.



Findings.-- The most important person to encourage a separate course in agricultural mechanics was the teacher of vocational agriculture, while the most important statement was to supply a vocational need not present in other school classes. The primary reason for continuing a separate course in agricultural mechanics was two-fold: (a) gave the students an opportunity to develop a skill not present in other classes, and (b) utilized the agricultural mechanics facilities more efficiently. Because the separate course of agricultural mechanics interfered with the operation of regular vocational agriculture classes was indicated as being the main reason for discontinuing a separate program in agricultural mechanics. The main criterion for selecting students enrolling in either program was the willingness of the students to work. The operational procedures receiving the most emphasis in regular vocational agriculture were encouraging students to join the FFA and making supervisory visits to students. However, the operational procedures receiving the most emphasis in a separate course of agricultural mechanics were (a) individualized instruction, (b) construction of projects, and (c) emphasis from the administration. In general it was found that more emphasis was placed upon various instructional areas within the separate course of agricultural mechanics. However, it was concluded that very little difference existed between continuing and discontinued programs in terms of emphasis placed upon agricultural mechanics instruction in regular vocational agriculture and the separate course of agricultural mechanics.

KASTL, MICHAEL L. A Study of Teacher and Student Attitudes Toward the CVET Program in Mechanics in Oklahoma. Thesis, M.D., 1972, Oklahoma State University, 53 p. Oklahoma State University Library, Stillwater.

Purpose.-- The first purpose of this study was to determine student attitudes toward selected areas of the CVET mechanics program in Oklahoma. The second purpose was to examine attitudes of mechanics teachers in the CVET program toward selected areas of the program. The third purpose involved the background of the CVET mechanics teachers.

Method.-- Attitude questionnaires were administered to the eight CVET mechanics teachers and 203 CVET mechanics students during the spring of 1971. Data from the questionnaires were calculated and presented in percents and average rating form.

Findings.-- Based on the data collected, certain conclusions were drawn from the findings concerning the CVET mechanics teachers' and the CVET students' attitudes toward areas of the CVET program. The students felt that they had the best teachers who were very interested in the program. The students also indicated the material in the course was presented in an interesting, understandable and practical manner. It was further concluded that the students felt that the equipment was used, but more space was needed to facilitate this use. The CVET mechanics teachers revealed that the students are

responsive, respectful, and interested in the program, but more time should be spent with some than others. The teachers further indicated that larger facilities would enhance the program and that the teachers should teach only within the CVET program. It was also concluded that more cooperation is needed between the state department and the school administrators and that seminar meetings would be very beneficial to the CVET program. The majority of the teachers had a Bachelor of Science degree and a standard teaching certificate. The average age of the CVET mechanics teachers was 34 and they had taught an average of four and one-half years.

KISSINGER, WILLIAM C. A Study of Certain Conditions and Situations Regarding Prospective Employment Opportunities in Agriculture in Virginia. Thesis M.S., 1971, Virginia State College. 51 p., Library, Virginia State College, Petersburg.

Purpose.--To investigate and summarize present and future employment opportunities for college trained persons who will be seeking a career in agriculture in Virginia.

Method.-- Twenty-five successful farmers, selected randomly who specialized in agricultural enterprises as livestock, crops and horticulture were interviewed. Through this interview the investigator was able to ascertain the kinds of information the farmer desired the agricultural graduate to possess in order to be most beneficial to him and the agricultural communities in Virginia.

Findings.-- For students who were seeking an agricultural on-farm career, the most important study areas were pesticide control, personnel management and farm management.

For students seeking a career in agricultural non-farm enterprise, the most important studies were pesticide and environmental research, environmental toxicology, personnel management and mechanization.

KITNUKUL, MANAT. Plans for Developing and Implementing Short Courses in Livestock Production for Adults Through Vocational Agricultural Schools in Northeastern Thailand. Report, M.S., 1972. Oklahoma State University, Stillwater.

Purpose.-- The purpose of this study was to make plans for developing and implementing a short course in livestock production for adults to be taught by the vocational agriculture schools in Northeastern Thailand.

Method.-- The programs in the vocational agriculture schools in Thailand were thoroughly reviewed, as was literature relevant to the establishment and maintenance of adult and young farmer courses in agriculture in the United States.

Findings.-- It was concluded that a majority of rural students dropped out of school at a high level between grade 5 and grade 12. Many of the students dropping out tended to remain in the area of production agriculture. Plans were made for developing short courses in the more important agricultural production areas of livestock management and nutrition. It is recommended that this program be put into effect in three vocational schools in Northeastern Thailand.

KITNUKUL, SUNEENART. A Program for Developing Animal Nutrition Curriculum in Agricultural Schools in Thailand. Report, M.S., Oklahoma State University, 94 p. Department of Agricultural Education, Oklahoma State University, Stillwater.

Purpose.-- The purpose of this study was to develop curriculum units of instruction in animal nutrition to be given by vocational agriculture schools in Thailand.

Method.-- Usable information which will help the vocational agriculture student understand the principles of nutritional requirements, feeds and feeding, management producing better quality, and management producing larger quantities of livestock products were presented. The basic core curriculum for Vocational Agriculture I and II in Oklahoma was used as a major source in developing the study.

Findings.-- The review of literature covering various opinions and studies revealed that a progressive curriculum should be developed in terms of behavioral objectives by selecting from subject areas, specific content, and types of learning experiences.

LARK, FLOYD JAMES. Development and Testing of Selected Curriculum Units for Agricultural Career Awareness in Oklahoma. Dissertation, Ed.D., 1972, Oklahoma State University. 117 p. Oklahoma State University Library, Stillwater.

Purpose.-- The purpose of this study was to develop and pilot test selected curricula units as a basis for developing more curricula which can be used by teachers of vocational agriculture in helping students to become aware of the occupations which are available and developing in agriculture.

Method.-- This study included the ninth grade students in 12 departments of vocational agriculture in Oklahoma. First, representative occupations from the broad field of agriculture were selected using the counsel of authorities from each field and demand data for agricultural production, agricultural sales and services, agricultural mechanics, agricultural products, ornamental horticulture, natural resources and forestry. A curriculum unit and video tape were developed for each of the following occupations: (1) farm management (operator), (2) agricultural sales clerk, (3) agricultural mechanic, (4) meat cutter, (5) nurseryman, and (6) forestry technician. Each



of these units were taught in an experimental school where a pre-test and post-test were given to the students. Also, control schools were used only where the pre- and post-tests were given. In addition to a unit on a specific agricultural occupation, each teacher taught a unit developed on self-discovery. The same schools were used as experimental and control groups.

Findings.-- The gain in scores made by the students was significant at the .05 level for each unit tested. It was found that the scores of the students did rise significantly in each of the units taught in the experimental schools as compared to the control schools.

McAFEE, DALTON H. A Comparison of Certain Characteristics of Teacher Community Aides (SEAW) at Tuskegee Institute. Thesis M.S., 1972. Tuskegee Institute. 66 p. Library, Tuskegee Institute, Tuskegee Institute, Alabama.

Purpose.-- The primary objective of this study was to determine whether a relationship exists among age of teachers, teacher aides and community aides, sex of community aides, educational attainment of teacher aides and community aides, and post-experience of teachers of classroom performances of participants in the 1965-66 OEO-Seasonally Employed Agricultural Workers Program at Tuskegee Institute.

Method.-- Teachers were employed together with indigenous assistants for each class. Each teacher worked with 12-18 functionally illiterate individuals. The teacher aides assisted the professional instructors in class work, making demonstrations, encouraging full-time participation, preparation of teaching materials, keeping records, etc. Teacher-counselors and aides were required to attend workshops, institutes, and perform all and any activities that fell within the educational scope of the project. The teachers were also required to make home visitations in an attempt to bring education to the whole family and to develop adequate home study and wholesome family relations and decorum.

A core of community aides were chosen from among the indigent population in approximately fifteen to twenty communities in the counties selected. These community aides, in cooperation with the director of the program's personnel, constituted the main body that identified, cataloged, encouraged and recruited participants for the various classes, workshops, and programs set up under the project. They served as a means of entry into the community, assisted with interviewing, and helped to determine needs and problems.

Findings.-- Based on the findings of this study, the following conclusions were reached concerning the null hypotheses tested:

1. There is no significant difference between age of teachers and and classroom performance of participants (Test I) in the OEO-Seasonally Employed Agricultural Workers Program.

2. There is no significant difference between age of teacher aides and classroom performances of participants (Test I) in the 1965-66 OEO-Seasonally Employed Agricultural Workers Program.
3. There is no significant difference between age of community aides and classroom performances of participants (Test I) in the 1965-66 OEO-Seasonally Employed Agricultural Workers Program.
4. There is no significant difference between sex of community aides and classroom performances of participants (Test I) in the 1965-66 OEO-Seasonally Employed Agricultural Workers Program.
5. There is a significant difference between educational attainment of teacher aides and classroom performances of participants (Test I). There is no significant difference between educational attainment of teacher aides and classroom performances of participants (Test II).
6. There is a significant relationship between educational attainment of community aides and classroom performances of participants (Test I). There is a significant difference between educational attainment of community aides and classroom performances of participants (Test II).
7. There is a significant difference between post-experience of teachers and classroom performances of participants (Test I). There is a significant difference between post-experience of teachers and classroom performances of participants (Test II).

McMINN, J. H., J. F. Shill and J. E. Wall. The Career-Centered Curriculum for Vocational Complexes in Mississippi -- Second Interim Report. Non-Thesis Study, 1971. Mississippi State Board for Vocational Education. 86 p. Mississippi State Department of Education, Division of Vocational-Technical Education, Jackson.

Purpose.-- The goal of this project is to provide guidelines and give impetus to the development of career-centered curriculums for vocational complexes in Mississippi. It is designed to develop and demonstrate to teachers, administrators, and to the public a coordinated and integrated program of career development from the first grade through post-secondary vocational-technical education. Ten specific objectives are listed.

Method.-- The procedure designed to implement the career-centered concept spans all levels of the educational ladder. It places heavy emphasis upon reorientation of the traditional school concept about occupational education. During the process students are exposed to occupational education as they enter the elementary school and continue learning about, and preparing for, the world of work as they progress through elementary, junior high, secondary, and post-secondary schools in the area.

The procedure views the levels of occupational education as being a pyramid with students making decisions about careers and needed training based upon broad exploratory experiences and counseling obtained through the program. As students narrow their choices about occupational selections, individual occupational experiences become more sophisticated and intensified.

Findings.-- Elementary teachers in the ten attendance centers worked on curriculum committees which integrated career education materials into the ongoing curriculum. Many new occupational songs, games, plays, etc. were developed for use with elementary students.

Occupational orientation course content was revised to include six rotation areas designed around occupational clusters. This facilitated increased use of team teaching, "hands-on" experiences, field trips, and resource persons.

The cooperative education program made much progress in increasing enrollment and training stations during the second year of operation. Remedial education classes continued to serve students in order to assist them in attaining their educational and occupational objectives. Intensive short-term training was made available to students about to leave school (both those about to drop out and those about to graduate) with salable occupational skills. Placement offices were established and functioned in each of the three combination junior-senior high school attendance centers. Placement activities were of both the in-school and out-of-school types.

Community involvement was at a much greater level than in the previous year. A concerted effort at dissemination and public relations was maintained. Dissemination was accomplished through news media, professional meetings, open house, visits from personnel in other school systems (state, region, and nation), in addition to phone calls and correspondence concerning the project.

McNEIL, EMANUEL. A Survey of Air and Water Pollution Affecting the Agricultural Economy in Metropolitan Nashville, Davidson County, 1969-70. Tennessee State University Library, Nashville.

Purpose.-- (1) To determine the effects of air and water pollution on the agricultural economy in metropolitan Nashville, Davidson County and (2) to determine the awareness of farmers about the existence of air and water pollutants in Davidson County, and (3) to stimulate the government agencies and research centers to evaluate and initiate programs to fight pollution in metropolitan Nashville, Davidson County.

Method.-- Questionnaires concerning (1) sources of pollutants affecting crops, (2) reduction of incomes caused by pollution, and (3) effects of air and water pollution on various agricultural crops were sent. The responses were compiled and interpreted.

Findings.-- It was ascertained that 32 per cent of the farmers lose about 5 per cent of their gross income per year due to air and water pollution and that there is a threat of further loss with increasing pollution.

About 24 per cent of the farmers in the county under study are aware of the need for control of pollution in relation to agriculture.

MILLAN-SAMBOLIN, JOSE A. Professional and Technical Competencies Needed in the Pre-Service Vocational Agriculture Curriculum in Puerto Rico. Dissertation, Ph.D., 329 p. Department of Agricultural Education, Louisiana State University, Baton Rouge.

Purpose.-- The primary purpose for conducting this study was to determine the technical and professional training needs of the prospective vocational agriculture teachers in Puerto Rico. The objectives of this investigation were the following:

1. To determine the training needs (competencies) of the prospective teachers of vocational agriculture in the area of professional education.
2. To determine the technical training needs (competencies) of the prospective teachers of vocational agriculture in the areas of: soil science, plant science, animal science, farm business management, and farm mechanics.
3. To determine the degree of acceptance of the present teacher education curriculum by teachers, supervisors and teacher educators of vocational agriculture.
4. To obtain the recommendations from teachers, supervisors, and teacher educators for the improvement of the teacher education curriculum at the University of Puerto Rico.
5. To determine the relationship between selected professional characteristics of the teachers of vocational agriculture to their expressed training needs in technical and professional areas of teacher education curriculum. These characteristics were: time of graduation, undergraduate curriculum, grade-point index, teaching experience, teaching program, and other professional experience.

Method.-- The Descriptive Survey Method, with the Group Interview Technique, was used in this study. Questionnaires providing for the evaluation of the undergraduate teacher education at the University of Puerto Rico, and the evaluation of 143 technical and professional competencies in vocational agriculture teacher education were provided. Three professional educator groups, i.e., teachers of vocational agriculture, supervisors of the vocational agriculture program, and teacher educators at the University of Puerto Rico participated in the study.

The instruments were designed with the aid of a panel of professors that served as specialists in their respective fields in teacher education and by adopting ideas from similar studies. These instruments were tested for clarity, validity, and pertinency of items by a 10 per cent sample of the universe of the study.

Number and per cent distribution, weighted mean values, frequencies, index values, standard deviation, t-values, and F-ratio values were calculated accordingly.

The F-ratio and t-tests were used for testing the null-hypotheses of no significant difference in mean responses. The null-hypotheses were accepted or rejected at the .05 level of confidence.

Findings.-- The majority of the teachers of vocational agriculture in Puerto Rico did not follow the specialized teacher education undergraduate curriculum, taught full-time adult farmer groups, had few years in teaching experience, worked under a provisional or probationary contract, had a graduation point index below 2.50, and belonged to a wide range of graduating classes.

Most of the teachers, supervisors, and teacher educators favor a revision of the undergraduate teacher education curriculum at the University of Puerto Rico so as to provide for: (1) more flexibility in the technical education courses, (2) higher competency in the professional and technical areas, and (3) attract more students majoring in agricultural education.

In the judgment of the teachers, the supervisors, and the teacher educators the 143 professional and technical competencies studied were of considerable importance for the development of the vocational agriculture program in Puerto Rico, but the prospective teachers went into teaching competent in only 50 per cent of those competencies.

Professional background characteristics of the teachers, i.e., (1) teaching experience, (2) teaching program, (3) professional experience other than teaching, and (4) general undergraduate grade-point index; had a significant influence on the responses of the teachers as to: (1) "competency acquired," (2) "importance of competency acquired," and (3) additional training needed in some of the professional and technical areas of the undergraduate curriculum.

Farm Mechanics, Farm Business Management, and Professional Education were the three areas of the undergraduate curriculum where teachers expressed their greatest training needs.

MILLER, TEXTON R. and GECIL L. STRICKLAND. Teacher Attitudes and Adoptions of Concepts and Practices in Programs for the Disadvantaged. Faculty Study, North Carolina State University, Raleigh. 56 p. Occupational Education Research Series No. 2. School of Education Department of Agricultural Education. Spring 1972.

Purpose.-- To ascertain teacher attitudes toward selected concepts and practices in programs for the disadvantaged.

Method.-- Questionnaire follow-up of participants in a three-week institute for teachers of the disadvantaged. Part one consisted of 37 conceptual statements on a Likert-type inventory. Part two contained 36 teaching practices attached to an adoption-level scale. Instrument pretested. Total of 65 teachers (78 per cent) returned usable records. Data tested for significance.

Findings.-- (1) Teachers saw themselves slightly more favorable toward these concepts and practices than they perceived their administration to be. Significant at .05 level of probability. Both groups reflected favorable attitudes.



(2) More than 75 per cent of the teachers reported favorable attitude toward the practices as a group. Nearly 42 per cent had reached the "trial stage" or higher on the package of practices.

(3) About 22 per cent of the teachers reported they did not favor the list of practices on the whole.

(4) Two personal factors, age and professional degrees, showed correlation to teacher scores on practices.

(5) Smaller classes and improved communication and cooperation with administrators, parents, teachers, and local industry were reported as the ultimate answer to better programs for the disadvantaged.

MILLER, TEXTON R. (Project Director) A Status Study of Occupational Education in North Carolina (1971-72). Faculty Study. North Carolina State University, Raleigh. 156 p. Occupational Education Research Series No. 1, School of Education.

Purpose.-- (1) To determine who was being served by occupational education. (2) To determine the scope of opportunities for vocational education. (3) To determine the relationship between program offerings and manpower needs. (4) To determine the characteristics of the professionals who administer, supervise or teach in the programs of occupational education.

Method.-- Faculty-led interview teams obtained data of secondary schools from 16 superintendents, 38 principals, 345 teachers and 3,056 students. Sixteen community college institutions contributed information from 47 administrators, 344 teachers and 1,242 students. Sample was stratified at random with 100 per cent participation by administrative units and schools.

Findings.-- (Secondary Education only)

(1) Administrators of secondary schools expressed need for a 58 per cent increase in funds for occupational education. (2) From 69-70 to 70-71 industrial education increased 23 per cent, business and distributive education 11 per cent, while agriculture decreased nearly 12 per cent. (3) Predicted changes for 1972-73 were: agriculture--11 per cent decrease, health--37 per cent increase, and industrial--14 per cent increase. (4) Advisory committees for occupational education had been established in 3 of 15 administrative units. (5) Superintendents reported much less personal occupational work experience (43 per cent reported "none") than administrators holding other positions at the administrative unit level. (6) Occupational teachers: 19 per cent had Master's degree; 2 per cent had not graduated from high school. Nearly 10 per cent had obtained no occupational experience other than teaching. (7) About 85 per cent of these occupational teachers expressed the viewpoint that they were receiving "overall encouragement" from their administrators. (8) Transfers and school-leavers in occupational education totaled less than 10 per cent per year. (9) About 25.3 per cent of the student

sample were classified as students in occupational education; 80 per cent had enrolled in some vocational course during their high school career. (10) Nearly 31 per cent of the students said they never had a conference with their counselor; 60 per cent reported one conference only. (11) About 33 per cent of occupational students were engaged in on-the-job training. (12) Ninety per cent of all students, general or occupational, reported that their "school" does not view occupational education students as "generally below average."

PAN-NGA, AMNUAY. A Comparison of Standard Curriculum in Mechanized Agriculture for Years One and Two of Vocational Agriculture in Thailand and in Oklahoma. Report, M.S., 1972. Oklahoma State University, 26 p. Department of Agricultural Education, Oklahoma State University, Stillwater.

Purpose.-- The major purpose of this study was to compare a standard curriculum in mechanized agriculture for years one and two for vocational agriculture in Thailand and in Oklahoma. The outcome was to develop needed teaching plans in Agricultural Mechanics for use in vocational agriculture in Thailand.

Method.-- The study and preparation of this study were made on the basis of library research including books, bulletins, catalogues, and printed materials from both United States and Thailand sources.

Findings.-- The findings indicated that in Oklahoma the teachers of vocational agriculture and the State Department of Vocational Agriculture were responsible for developing the Standardized Curriculum and the courses of study, but in Thailand they were developed by Ministry of Education. The courses of study in vocational agriculture offered in Oklahoma tend to be practical and more nearly suited to local community needs and local school policy than the courses of study in Thailand.

ROUNDS, LYLE WAYNE. A Comparison of the Supervised Farm Training Programs and Leadership Activities of Farm and Non-Farm Students of Vocational Agriculture in Washington, Nowata, and Craig Counties. Report, M.S., 1972. Oklahoma State University, 34 p. Department of Agricultural Education, Oklahoma State University, Stillwater.

Purpose.-- The purpose of this study was to compare the supervised farm training programs and leadership activities of farm and non-farm students of vocational agriculture in Washington, Nowata, and Craig counties.

Method.-- This study was limited to a population of seven vocational agriculture departments in Craig, Nowata, and Washington counties. Questionnaires were completed and returned by teachers

of seven vocational agriculture departments. These questionnaires were concerned with the enrollment of students in vocational agriculture, participation in leadership activities and participation in production enterprises. The study population came from all the vocational agriculture departments in the Oklahoma counties of Craig, Nowata, and Washington.

Findings.-- The study reveals that the enrollment of non-farm students as compared to farm students was much less. It also indicates that a lower percentage of non-farm students participated in leadership activities as compared to farm students. One can also conclude from the study that a lower percentage of non-farm students, as compared to farm students, have production enterprises and that the percentage of no production enterprises was greater with non-farm students, as compared to farm students.



SCHUMANN, HERBERT B. Conceptual Variations Concerning the Role of the Teacher of Vocational Agriculture as Perceived by Vocational Agriculture Teachers and High School Principals. Ph. D. Dissertation, 1972, Texas A&M University. 159 p. Library, Texas A&M University, College Station.

Purpose.-- The primary purpose was to determine conceptual variations concerning the role of the teacher of vocational agriculture as perceived by vocational agriculture teachers and high school principals. Also, the relationships between selected background variables and the opinions of teachers and principals were determined.

Method.-- Data were obtained from questionnaires composed of 43 statements mailed to 260 vocational agriculture teachers and 260 high school principals in Texas during the academic year 1971-72. The eight areas investigated were: purposes of the program, policies of the program, adult education, FFA activities, community relationships, school responsibilities, instructional program in vocational agriculture, and professional responsibilities. Analysis of variance was used to determine differences between the two groups. The product-moment correlation was used to determine the relationships between the background variables and the opinions of teachers and principals.

Findings.-- Significant differences of opinion between teachers and principals were found to exist for 29 of the 43 statements. Differences were greatest regarding policies of the program. Other areas showing a high degree of difference of opinion were adult education, FFA activities, community relationships, school responsibilities, and professional responsibilities.

Size of school was found to be associated with the opinions of teachers and principals. Tenure was associated with the opinions of teachers. The tenure of principals, however, was not associated with their opinions. The opinions of principals who were former vocational agriculture teachers differed from those who had not taught vocational agriculture. Previous experience as a student in vocational agriculture was not associated with the opinions of principals.

SHOEMAKE, R. GLENN. The Vocational Agriculture Program as viewed by Selected Groups in Mississippi. Thesis M.S., 1972. Mississippi State University. 138 p. Library, Mississippi State University, Mississippi State, Mississippi.

Purpose.-- This study deals with the views of selected groups (administrators, school board members, secondary school students, and vocational agriculture teachers) toward curriculum and policy for vocational agriculture programs, and the leadership abilities of teachers involved.

The major purpose of this study was to provide the leaders and lay members concerned with Mississippi's vocational agriculture program information relevant to improving and planning existing and future programs. It also was designed to be a source of information from secondary students, both those with experiences in the vocational agriculture programs and those without such experiences, concerning the merits and demerits of the present vocational agriculture program.

Method.-- Data included in this study were obtained via mailed questionnaires to administrators and vocational agriculture teachers. The superintendents included in the study distributed questionnaires to the school board members, while vocational agriculture teachers sampled secondary students included in the study. Responses of the four groups were coded on International Business Machine code sheets. Tabulations and statistical analysis were performed by hand at Mississippi State University. Fourteen programs were involved in the study.

Findings.-- Ratings indicated that the production agriculture curriculum component was most adequate, while the agribusiness curriculum component was least adequate. All of the items used in the appraisal of curriculum for vocational agriculture were rated sufficient.

It was also found that nonvocational students consistently rated the items in the appraisal higher than did vocational agriculture students.

In appraising the policy for vocational agriculture, all items used were rated sufficient by all groups. It was found that there was a difference of opinion among administrators and vocational agriculture teachers.

The appraisal of leadership abilities of the vocational agriculture teachers was consistently rated higher than other phases of the vocational agriculture program by administrators, school board members, and vocational agriculture teachers. Ratings in this section were generally highly sufficient or outstanding.

It was noted that administrators consistently rated the program lower than school board members, and school board members generally rated the vocational agriculture program lower than vocational agriculture teachers.

SHOEMAKE, R. GLENN. Images and Perceptions of Vocational Agriculture Programs in Mississippi. Research Report 8002, Series 2, 1972. Mississippi State University. 42 p. Research Coordinating Unit for Vocational-Technical Education, College of Education, Mississippi State, Mississippi.

Purpose.-- The primary concern of this study was to compare perceptions of administrators (superintendents and principals), school board members, students, and vocational agriculture teachers concerning selected areas of the vocational agriculture programs in Mississippi. The major purpose of the study was to provide information relevant to improving and planning existing and future vocational agriculture programs in Mississippi. Six specific objectives were listed.

Method.-- A random stratified sample of counties having a functioning vocational agriculture program was selected. Data were obtained via a mailed questionnaire to superintendents and vocational agriculture teachers. Six counties across the State of Mississippi were used. Information was transferred to IBM code sheets in order to summarize the data.

Findings.-- Information concerning the characteristics of the four groups was reported, as well as information pertaining to vocational agriculture curriculum policy and leadership abilities of vocational agriculture personnel.

All groups viewed the curriculum as adequate, but at different degrees. The production agriculture curriculum component was viewed most adequate and the agribusiness component least adequate. Nonvocational agriculture students' ratings were consistently higher than vocational agriculture students'.

Vocational agriculture teachers' ratings were generally higher than school board members', and school board members' ratings were consistently higher than school administrators'. All three groups viewed curriculum policy and leadership abilities of vocational agriculture personnel as being adequate. Ratings of each group for the leadership abilities of vocational agriculture personnel were somewhat higher than for the other two areas investigated.

SKINNER, ANTHONY W. An assessment of the Curriculum Guides for First and Second Year Vocational Agriculture Course in Southwest Missouri. Report, M.S., Oklahoma State University. 48 p. Department of Agricultural Education, Oklahoma State University, Stillwater.

Purpose.-- The major purpose of this study was to determine if the curriculum guides for Animal Science and Plant Science are accepted and used by vocational agriculture teachers in Southwest Missouri.

Method.-- Data were collected by means of a mailed instrument designed to obtain information about teachers, and an attitude scale to determine and evaluate teacher attitudes toward the Animal Science and Plant Science curriculum guides. The instrument

was sent to 65 teachers in Southwest Missouri, from which 60 replies were received.

Findings.-- Information on teachers in Southwest Missouri revealed that the largest age groups were from 20 to 29 and 40 to 49 years of age. Also, over half of the teachers responding had 10 years or less teaching experience, and that 25 of the 60 had a Master's degree or above. These teachers generally held a favorable attitude in assessing the curriculum guides for first- and second-year vocational agriculture courses. They agreed the Animal Science curriculum was adequately providing the proper type and amount of information, but that the Plant Science curriculum needed revision.

SKINNER, JOE DON. A Plan of Study in Ornamental Horticulture for Vocational Agriculture Students at John Marshall High School. Report, M.S., 1972, Oklahoma State University. 34 p. Department of Agricultural Education, Oklahoma State University, Stillwater.

Purpose.-- The objectives guiding this study effort include:  
(1) determining the year selected skill areas should be taught,  
(2) determining the competency rating of each skill area, and  
(3) preparation of a proposed outline for a course of study.

Method.-- Twenty-five ornamental horticulturists in urban Oklahoma City made up the study population. The researcher personally interviewed each respondent after first calling to set up an appointment. Interviews were conducted for the purpose of developing an outline of a course of study for vocational training to prepare students for employment in the field of ornamental horticulture. Data were analyzed through item counts and percentages.

Findings.-- Based on reactions of the horticulturists interviewed, it was found that the majority of skill areas received average competency ratings of more than 2.0 on a 4.0 scale. This would seem to indicate that most of the skill areas in the study were important for prospective horticultural business employees. It was also found that the employers recommended 19 of the skill areas for the first year of a program, four for the second year, and 19 for the third year. Overall, it appeared that employers preferred the more basic or foundation skills for the first-year program and a more complex for the third year. Because of the inclusion of only a few skill areas in the second-year program, the investigator felt this would be a good time for cooperative work experience. A three-year program was outlined by the investigator by utilizing the responses of employers. It was recommended that the average competency ratings be used to determine emphasis to be placed on the various skill areas.

SMITH, JIMMY L. A Study of Enrollment Decisions of Freshmen Students. Department of Agricultural Education, Tennessee State University, Nashville.

Purpose.-- (1) To determine the relative influences of selected people upon the decision of the students to enroll in the School of Agriculture in one of the State Universities in Tennessee and (2) to determine the relative importance of selected reasons on the decisions of the students to enroll in the School of Agriculture in one of the State Universities in Tennessee.

Method.-- Data were obtained by sending questionnaires to Middle Tennessee State University, Austin Peay State University, and Tennessee State University. Responses to the data were compiled and the relative influence of factors and people on the decisions of freshmen enrolled in the School of Agriculture was determined by the number of first rankings.

Findings.-- The study revealed the parents as the most influential people upon the students in their decisions to attend the University. A noteworthy feature of the study is that school principals had absolutely no influence at all on the decisions of the students.

SMITH, THOMAS NEIL. A Comparison of the Availability, Utilization, and Projected Needs of Audio-Visual Aids Between Vocational Agriculture Student Teaching Centers and Selected Non-Student Teaching Centers in Oklahoma. Thesis, M.S., 1972, Oklahoma State University. 73 p. Oklahoma State University Library, Stillwater.

Purpose.-- The purpose of this study was to determine the availability, utilization, and projected needs of audio-visual aids in Oklahoma vocational agriculture departments based on a comparison of student teaching centers and selected non-student teaching centers. A secondary purpose was to determine to what extent vocational agriculture teachers and school administrators recognize the importance of audio-visual aids as an instructional resource.

Method.-- Questionnaires were designed and mailed to the sample involved in this study, 42 student teaching center teachers, and 42 non-student teaching center teachers. Data from the questionnaires were calculated and presented in percents and in mean rating form.

Findings.-- Based on the data collected, conclusions were drawn from the findings concerning the availability, utilization, and projected needs of audio-visual aids. Even with a relatively high degree of formal education 49, or 53.8 percent, of the

teachers received training in audio-visual aids almost all by self-direction. Even with this low level of formal training in audio-visual aids, both groups of teachers indicated surprisingly good operating proficiency and relatively frequent use of audio-visual aids for supplementing their class instruction. Both groups indicated a definite need for audio-visual aids in the future and indicated that teacher education students should receive extensive pre-service training in audio-visual aids.

SNOWDEN, OBED L. In-Service Development of Vocational Teachers for Competencies in Non-Farm Occupations. Non-Thesis Study, 1971. Mississippi State University. 87 p. Department of Agricultural Education, Mississippi State, Mississippi.

Purpose.-- The ultimate objective of this project was to upgrade in-service vocational agriculture teachers so that they would have sufficient competencies to plan, instruct, coordinate, and evaluate programs for untrained, disadvantaged, and normal secondary students to enter and progress in occupations of agricultural business and industries. Six specific objectives were listed.

Method.-- Nine experienced teachers of vocational agriculture and one post-secondary technical ornamental horticulture teacher were selected and placed in an agricultural industry or occupation that was found in their immediate geographical location. Data included detailed experiences of daily activities that each teacher was subjected to in the industry or business.

Findings.-- A total of seventeen different businesses and industries were used by the teacher participants for intern experiences. These businesses and industries provided an opportunity for the ten teacher participants to engage in ninety-eight different competency-developing activities. These activities were all the kinds of activities engaged in from day-to-day by the regular business and industry personnel. These competency-developing activities ranged from displaying products in farm supply, sales, and service businesses; to making feed in a complex poultry feed manufacturing industry.

SNOWDEN, OBED L., et al. Core Curriculum for Agriculture and Agribusiness on All Levels of Education. Non-Thesis Study, 1972. Mississippi State University. 123 p. Agricultural Education Department, Mississippi State, Mississippi.

Purpose.-- The primary purpose for the study was to find knowledge and skill areas needed by all persons engaged in, or preparing to engage in, agricultural or agri-related occupations. Five specific objectives were listed.



Method.-- A twenty percent random stratified sample of counties in the eight economic areas of Mississippi was taken. A total of 262 agribusiness personnel; 122 superintendents, principals, and vocational agriculture teachers; 200 farmers; and 712 secondary students responded to the basic questionnaire. Information was taken from individual questionnaires and coded on IBM code sheets. Statistical tabulations (frequency percentage, arithmetic means, ranks, modal groups, and ranges) were performed on electronic computers.

Second, a questionnaire to appraise different methods of teaching and staffing was developed. This instrument was responded to by a sample of secondary and post-secondary teachers of agriculture. Third, the final data gathering instrument was developed utilizing the information and subject matter areas from the basic questionnaire. This instrument was responded to by selected principals, vocational agriculture teachers, state supervisory personnel, vocational directors, county superintendents, and curriculum specialists.

Findings.-- Findings were grouped into four different headings which were: (1) characteristic information, (2) curricular appraisal, (3) appraisal of staffing patterns and methodology of teaching agricultural and agribusiness occupations, and (4) opinions of the jury of experts toward the proposed core curriculum for agricultural and agribusiness occupations on all levels of education. The curriculum was divided into two aspects, namely vocational and environmental. None of the items received an insignificant rating in either aspect of the curriculum. Thus, all items could be included in the curriculum, but some would receive less emphasis in the skill development period.

In appraising staffing patterns and methodology of teaching, it was the opinion of those questioned that some form of differentiated staffing would be necessary to implement a comprehensive program, and that most innovative types of teaching could help attain their instructional objectives.

The reactions of the jury to the outlined material for inclusion in the career education curriculum were very positive.

STARKS, LESLIE OUGHANE. Problems Perceived and Information Used By a Group of Kansas Young Farmers in Making Farm Management Decisions in Wheat Production. Report, M.S., 1972. Oklahoma State University, Stillwater.

Purpose.-- The major purpose of this research effort was to identify the major problem areas encountered by a selected group of Kansas Young Farmers in wheat production and to investigate the

sources of information used by this group in making management decisions.

Method.-- In order to achieve the major purpose of the study, respondents were divided into three age groups for comparison purposes and the following specific objectives were formulated: (1) to determine the extent to which the groups were involved in wheat production, (2) to identify those production problems with which the young farmer groups were experiencing the most difficulty, (3) to identify the sources of information the groups used for each problem area encountered, and (4) to determine how frequently each source of information was used within each problem area.

Findings.-- It was found that all the farmers surveyed produced wheat. From the study it was concluded that for the major problems selected by the young farmers, farm magazines were the most frequently used of all information sources. The county extension office, the local cooperative, the young farmer classes, and the soil conservation service are the most frequently used business or government information sources. Relatives, neighbors, and extension specialists are the most frequently contacted persons by young farmers. Farm organizations are not important information sources regarding wheat production problems. The major wheat production problems of the young farmers, regardless of age, were selecting a variety, or varieties of wheat, land tillage practices, and fertilizing wheat. Vocational agriculture instructors in the study were not recognized as important resource persons for wheat production problems.

STEAKLEY, DERRELL L. Characteristics Contributing to the Success of Young Farmer Chapters. Dissertation Ph.D., 1972, Texas A&M University. 99 p. Library, Texas A&M University, College Station.

Purpose.-- The purpose of this research was to identify characteristics that contributed to the successful operation of young farmer chapters in Texas.

Method.-- Data were collected through use of questionnaires returned by 128 advisors of young farmer chapters. Performance ratings were provided by area supervisors of vocational agriculture for the performance level of chapters.

These ratings were used as the dependent variables and characteristics of young farmer chapters as the independent variables. The relationship of independent and dependent variables was determined by use of analysis of variance, the Duncan multiple range test, and the chi-square test. Results were considered significant at the .05 level of probability.

Findings.-- Chapters rated as being highly successful by area supervisors possess characteristics that are distinctly different from those rated as being less successful. Chapters considered to be highly successful have (a) significantly higher ratings assigned to the importance of young farmer chapters by advisors; (b) younger members; (c) more members that had completed high school and more members that had completed one college degree; (d) more members that were engaged in an agricultural occupation other than production agriculture; (e) larger numbers of social and educational meetings conducted with the educational meetings consisting of higher numbers of production agriculture, management, and agricultural mechanics meetings; (f) larger membership, more members in attendance at area and state meetings, more community service activities, larger numbers of resource persons used for teaching young farmer classes; and (g) more teachers of vocational agriculture in schools.

STEWART, JOHN C. The History of Legislation Affecting Vocational Education. Thesis M.S., 1972, Virginia State College. 39 p. Library, Virginia State College, Petersburg, Virginia.

Purpose.-- To trace the origin of legislation providing for vocational education throughout the United States, and to discover specific events which influenced the inauguration of certain vocational education acts.

Method.-- A survey of the literature related to educational legislation was undertaken by the investigator. Also, data for the study were obtained through interviews which included members of the Virginia General Assembly, State Director of Vocational Education, officers of the American Vocational Association, and members of the Congress of the United States.

Findings.-- In 1916 Vocational Education legislation became a national preparedness factor in the training of manpower for a war effort.

The Smith-Hughes Act permanently authorized \$7.2 million for vocational education.

The National Defense Education Act brought the first significant addition to the vocational education program since 1917.

The Vocational Education Act of 1963 was spurred by the high level of unemployment among young people.

Even though federal funds for vocational education have multiplied by 112 times since 1918; and total expenditures by states, 158 times; they are still inadequate to expand and develop programs in accordance with the counties' needs.

WEBER, RICHARD CLARENCE. Agricultural Mechanization Competencies Needed by Selected Louisiana Farmers with Implications for Program Planning in Adult Education. Dissertation Ph.D., 1972, Louisiana State University. 195 p. The Department of Vocational Agricultural Education, Louisiana State University, Baton Rouge, Louisiana.

Purpose.-- The primary purpose of this study was to secure information to be used as a guide in formulating course content for adult education programs in agricultural mechanization in Louisiana. Data relative to the purpose were determined by a rating of importance of certain mechanical skills and abilities considered necessary for a farming operation. Therefore, certain skills and abilities in agricultural mechanization were ranked according to importance as perceived by four farming groups: crop farmers, dairy farmers, livestock farmers, and diversified farmers.

Method.-- The descriptive survey method utilizing the questionnaire technique was used in this study. Questionnaires consisting of six Major Divisions with 62 skills and abilities were mailed to 75 vocational agricultural teachers in 55 of the 64 Parishes in Louisiana. The questionnaires were distributed to a total of 300 farmers in the 55 Parish area.

The instrument was first submitted to a jury for a critical review of the items and activities. All jury members responded. The instrument was further validated by pretesting on 12 Louisiana farmers.

An evaluation was obtained for each skill from each participating group by calculating the means from the responses to the skills and abilities listed under each Major Division. The analysis of variance procedure was used as a test for significant differences among these groups. Where significant differences were noted, the responses of the crop farmers were compared with those of the other three groups. Responses of the dairy farmers were compared with those of the remaining two groups, crop farmers excluded, to see if they held different concepts from the livestock and diversified farmers. A third test compared the average responses of the livestock farmers with the diversified group.

The coefficient of correlation statistical method was also used to analyze data. The four variables used when this statistical method was utilized were education, age, experience, and size of farm of the respondents. The association of each variable with each skill was presented.

Findings.-- The average age of respondents was 44 years with a range from 19 through 66.

The mean number of years of formal education completed by the respondents was 11.5 years and ranged from three to more than 17 years.

The average number of years in farming was 20.7.

The average size farm in this study was 476.7 acres with a range from below 50 to over 2,000 acres.

Diversified farmers accounted for 44.20 percent of the respondents. Crop farmers were 22.65 percent of the participants, while dairy farmers comprised 17.68 percent of the sample, and livestock farmers 15.47 percent.

Significant differences were found to exist among the responses to 15 of the 62 activities selected for this study. Three comparisons were made of these skills to determine the source, or sources, of the differences. Upon comparison it was found that crop farmers differed with the other three groups on 12 items, while the dairy farmers differed with the remaining two groups on one activity. The livestock and diversified farmers were at odds on four of the 15 activities.

Educational level of the respondent was significantly associated with importance assigned to 15 of the 62 skills correlated.

Age of the farmer was associated with importance assigned to seven skills.

Participant's farm size was associated with the level of importance assigned to 13 of the 62 skills and abilities in question.

Years in farming of respondent was associated with level of importance assigned to skills in 13 percent of the instances.

WILLIAMS, LAWRENCE SIDNEY and GUL M. TELWAR. The Perception of Governmental Agencies: Federal, State, and Local Designed to Improve the Level of Living of Rural People by One-Hundred Rural Families in Ten Counties in West Tennessee. Departmental Study. Tennessee State University. Department of Agricultural Education and Agricultural Economics, Tennessee State University, Nashville, Tennessee.

Purpose.-- The purpose of this study was: (1) to analyze and study the extent of awareness of rural people in selected counties in Tennessee and (2) to study the activities of the U.S. Federal, State and Local Government Agencies engaged in programs designed to alleviate poverty.

Method.-- Based on the findings, of the United States Economic Research Service, that West Tennessee contains some of the poorest counties in the country, ten counties were selected for study. From each of the counties, 30 families were selected in association with the Office of Economic Opportunity. Out of these, a random selection of ten families was made.

This study is mainly based on the questionnaires designed and administered by the Economic Opportunity Center in each county. Replies of families were collected by aides in each county's office. These were collected and a final questionnaire was sent out. The responses of the families were classified as county-wide and a conclusion arrived at.

Findings.-- The study showed (1) a mean educational level of 7.3 grades; (2) the mean annual income of the highest-earning county is only \$3,452 (i.e., only \$452 above the poverty level); (3) thirty percent of the families depend on welfare payments; (4) only two government agencies, the Agricultural Extension Service and the Department of Public Welfare, were familiar to the families; and (5) over 75 percent of the families were not familiar with the various anti-poverty campaign agencies of the government, but were desirous of knowing about their programs.

WILLIAMS, MICHAEL DALE. 'Occupational Titles in Oklahoma Agricultural Machinery Dealerships for Which High School Graduates May Qualify. Thesis, M.S., 1972, Oklahoma State University. 49 p. Oklahoma State University Library, Stillwater.

Purpose.-- The purpose of the study was to identify and describe those occupational titles in existence at agriculture machinery dealerships for which high school graduates may qualify.

Method.-- The executive director of the Oklahoma Hardware and Implement Association was consulted as to the 20 most progressive dealerships in the state. The managers of the dealerships were written to for confirmation of their willingness to participate in the study. Seventeen dealers agreed to participate in the research effort. An interview schedule was designed and administered to the managers of the dealerships. Findings from the interview schedules were tabulated and comparisons were made between the twelve occupational titles identified.

Findings.-- Occupational titles identified in the study for which high school graduates may qualify, in rank order of importance were as follows: Set-up Man, Assistant Partsman, Mechanic's Helper, Partsman, Salesman, Truck Driver, Janitor, Mechanic, Secretary, Service Manager, Reconditioning Man, and General Helper. The beginning salaries ranged from a low of \$251-\$300 per month to a high of over \$600 per month. Salaries



anticipated at the end of five-years experience ranged from \$350 to \$850 plus. A farm background was overwhelmingly preferred by all dealers in the study. The basic competency with the highest overall rating was "Follow Directions," while the lowest rating was for "Ability to Handle Routine Mathematical Problems." Most basic skills were "Relatively Desirable," while a small percentage of "Essential" and a few responses of "Unnecessary" were listed. Employees at agricultural machinery dealerships enjoy many fringe benefits. A conclusion was formulated that there is a wide variety of jobs available for high school graduates in pacesetter dealerships. Jobs identified require an appreciable amount of physical exertion. Agricultural machinery dealers prefer employees with a farm background. The beginning salaries were considered appropriate and chances for advancement within five years to a comfortable salary quite feasible.

WILSON, GERALD LEE. A Study of the Disciplinary Problems Encountered by Beginning Teachers of Vocational Agriculture in Oklahoma. Thesis, M.S., 1972, Oklahoma State University. 45 p. Oklahoma State University Library, Stillwater.

Purpose.-- The primary purposes of this study were to determine the more common disciplinary problems encountered by beginning teachers of vocational agriculture, to determine the frequency and causes of the various problems, to determine the most satisfactory methods of prevention of disciplinary problems, and to determine the most satisfactory methods of handling the various disciplinary problems.

Method.-- Fifty beginning teachers from the five supervisory districts of vocational agriculture in the state of Oklahoma were used in this study. The teachers were administered a questionnaire which covered the four areas of the problem. The questionnaires were mailed to the teachers and they were asked to complete the questionnaires and return them to the sender. After the questionnaires were returned, the data were tabulated and placed in tables. The problems encountered were ranked by frequency of occurrence. The causes of problems were grouped and the most commonly used methods of control for each disciplinary problem was determined.

Findings.-- Based on the data collected, certain conclusions were drawn from the study. One of the major conclusions was that beginning teachers will have problems of minor importance when teaching a class. It was further concluded that it was not necessary for beginning teachers to have 100 percent support from their superintendent or principal. Their classroom discipline will be determined largely by their own actions. Another conclusion derived from the study was the importance of the cooperating teacher in helping the future teacher form his

background for handling classroom problems. It was also concluded that beginning teachers rely on whipping as a corrective measure too much.

**YALLAPRAGADA, RAMMOHAN RAO.** A Follow-Up Survey Study of 1969-70 B.S. Agriculture Graduates From Tennessee State University, Nashville, Tennessee. Department of Agricultural Education, Tennessee State University, Nashville, Tennessee.

Purpose.-- The purpose of this study was to present a perspective of the existing employment positions, incomes and needs of the youth graduating from the School of Agriculture at Tennessee State University.

Method.-- The data were gathered by means of questionnaires which sought to elicit information about the academic attainments, occupational details, and levels of income of the respondents. Suggestions also were invited.

Findings.-- The cumulative grade-point average of the Bachelor of Science graduates is 2.60. Six percent were still going to school and six percent were unemployed. Median income is \$575 per month. A positive correlation is found between the Bachelor of Science grade-point averages and the monthly incomes of the graduates. Twenty-seven percent wanted to study for their Ph.D. degree. An interesting relationship was revealed between the monthly salaries and the desire for a Ph.D. degree. The average monthly salary of Ph.D. aspirants is far below the overall average of the entire group. The grade-point average of the Ph.D. aspirants is higher than others. The respondents wanted more courses to be added to the curriculum. They also desired to increase the teacher-student ratio.

RESEARCH STUDIES IN PROGRESS IN AGRICULTURAL EDUCATION

SOUTHERN REGION

1972-73

RESEARCH STUDIES IN PROGRESS  
1972-73

BRAKER, CLIFTON R. An Assessment of Attitudes of Teachers and Students of Vocational Agriculture Toward the FFA and Its Role in a Changing Agriculture. Dissertation Ed.D., Oklahoma State University, Stillwater.

BRYANT, C. DOUGLAS. A Status Study of Vocational Teacher Education in North Carolina. Faculty Study, Division of Occupational Education, School of Education, N. C. State University, Raleigh.

DAVIS, LUTHER JR. A Comparative Study of the Attitudes of the Staff and Participants Toward Prevocational and Vocational Training in the Seasonally Employed Agricultural Workers Program. Thesis, M.S. Tuskegee Institute, Alabama.

DELOZIER, DENNIS. The Effect of the Bartlesville Tri-County Area Vocational-Technical School on the Enrollment in Vocational Agriculture Classes in the Six High Schools With Vocational Agriculture Departments in Its Transportation Area. M.S. Report, Oklahoma State University, Stillwater.

DUNCAN, LINDELL. The Status of Agricultural Occupational Training Programs in Oklahoma. M.S. Report, Oklahoma State University, Stillwater.

GRIMES, JAY P. The Lee-Thorpe Occupational Interest Inventory as a Predictor of Curricular Decisions by Students in the College of Agriculture at Texas A&M University. Ph.D. Dissertation. Texas A&M University, College Station.

HENDERSON, BILLIE. Implementation and Evaluation of a Curriculum for Career Exploration in Agricultural Occupations. Dissertation Ed.D., Oklahoma State University, Stillwater.

HODGES, STANLEY L. Employee-Employer Assessment of the Effectiveness of Agricultural Mechanics Training Received at Modesto Junior College. Dissertation D.D., Oklahoma State University, Stillwater.

KHONYONGWA, JOSEPH. A Multivariate Statistical Analysis on Factors Affecting Net Migration Rates in Standard Metropolitan Statistical Areas of Alabama - 1900 - 1970. M.S. Thesis. Tuskegee Institute, Alabama.

LOUDERMILK, WALTER. Perceptions of Vocational Administrators and High School Principals Regarding the Role of the Vocational Administrator. Ph.D. Dissertation. Texas A&M University, College Station.

McMILLION, MARTIN B., CARTER BASS and A. H. KREBS. Assembling and Using Occupational Data Concerning Former Students of Vocational Agriculture in Virginia. Staff Study, State Department of Education, Virginia Polytechnic Institute and State University, Blacksburg.

ONGONDO, WYCLIFFE NYANJONG. Some Factors Affecting Curricular Improvement of Agricultural Education Programs in Kenya Secondary Schools. M.S. Thesis. North Carolina Agricultural and Technical State University, Greensboro.

PRICE, ROBERT R. and JAMES P. KEY. Construction and Evaluation of a Career Development Program in Agricultural Occupations for Advantaged and Less-Advantaged Rural Youth. Department of Agricultural Education, Oklahoma State University, Stillwater.

PRICE, ROBERT R. and H. ROBERT TERRY. A Professional Internship in Vocational Agriculture Occupational Training. Department of Agricultural Education, Oklahoma State University, Stillwater.

RICHARDSON, BURL B. Selected Factors Associated With Attrition of County Extension Personnel. Ph.D. Dissertation. Texas A&M University, College Station.

ROBINSON, DAVID. Forestry and J. L. Hollands Typology. Dissertation, Ed.D., Oklahoma State University, Stillwater.

TERRY, J. Y. A Study of the Aims and Needs of College Vocational Education Dropouts. Department of Vocational Agriculture Education, Louisiana Tech University, Ruston.

THOMAS, GLENN V. A Comparison of Junior College Transfer Students and Native Students in Agriculture at Oklahoma State University. Dissertation E.D. Oklahoma State University, Stillwater.

THOMAS, WINDEL. Salaries and Related Benefits of Vocational Agriculture Teachers in the United States. M.S. Thesis. Oklahoma State University, Stillwater.

UPDYKE, GARY. New Teachers' Perceptions of the Preservice Agricultural Education Program at Oklahoma State University. Dissertation Ed.D. Oklahoma State University, Stillwater.

## CLASSIFIED INDEX

	Page
I. Administration and Supervision . . . . .	3, 8, 37, 37
II. Curriculum Development. . . . .	39, 40
III. Educational Programs	
Adult Education . . . . .	3, 27, 47
Agricultural Mechanics. . . . .	25, 26, 35, 46
Programs for High School Students . . . . .	8, 9, 11, 13, 15, 17, 18, 18, 19, 21, 22, 23, 24, 28, 29, 31, 33, 35, 39, 41, 41, 42, 45.
Technical-Vocational Schools. . . . .	1
Young Farmer Program. . . . .	7, 43, 44
IV. Evaluation	
Program Evaluation. . . . .	10
V. Guidance and Counseling	
General . . . . .	50
VI. Occupational Information	
Employment Opportunities. . . . .	5, 6, 16, 27, 42, 48
Occupational Choice . . . . .	20
Career Education. . . . .	2, 12, 28, 30
Occupational Education. . . . .	34
VII. Teacher Education	
Curricula . . . . .	32
Student Teaching. . . . .	4, 22
Methods, Techniques and Procedures. . . . .	49